

Notice of Allowability

Application No.

09/805,580

Examiner

Dah-Wei D. Yuan

Applicant(s)

CHANG ET AL.

Art Unit

1745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 11/13/03.
2. ☒ The allowed claim(s) is/are 1-20.
3. ☒ The drawings filed on 14 March 2001 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.
5. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
 - (a) ☐ The translation of the foreign language provisional application has been received.
6. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE**

7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No. _____.
 - (b) ☐ including changes required by the proposed drawing correction filed _____, which has been approved by the Examiner.
 - (c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the margin according to 37 CFR 1.121(d).

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1 <input type="checkbox"/> Notice of References Cited (PTO-892) | 5 <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2 <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 6 <input type="checkbox"/> Interview Summary (PTO-413), Paper No. _____ |
| 3 <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No. _____ | 7 <input type="checkbox"/> Examiner's Amendment/Comment |
| 4 <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | 8 <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9 <input type="checkbox"/> Other |

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MONOPOLAR CELL PACK OF PROTON EXCHANGE MEMBRANE FUEL CELL
MONOPOLAR CELL PACK OF PROTON EXCHANGE MEMBRANE FUEL CELL
AND DIRECT METHANOL FUEL CELL

Examiner: Yuan S.N. 09/805,580 Art Unit: 1745 January 15, 2004

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October 16, 2003 has been entered. Claims 1,2,7-9,16-20 were amended.

2. The text of those sections of Title 35, U.S.C. code not included in this action can be found in the prior Office Action issued on June 6, 2003.

Claim Rejections

3. The claim rejections under 35 U.S.C. 102(e) as being anticipated by Walsh as evidenced by Kordes et al. on claims 1,6,9-11,15 are withdrawn because the independent claims 1,9 have been amended. The claim rejections under 35 U.S.C. 103(a) as obvious over Walsh, Kordes et al., and Besmann et al. are withdrawn because the independent claims 1 and 9 have been amended. The claim rejections under 35 U.S.C. 103(a) as obvious over Walsh in view of Kordes et al. on claim 17 have been withdrawn because the claim has been amended.

Reasons for Allowance

4. Claims 1-20 are allowed. The invention of independent claims 1,9,17 recites a fuel cell pack including a plurality of cells, wherein the cells are evenly disposed in a plane with an enclosed, contiguous hollow space interposed between two adjacent cells, an electrical connection member being positioned in the enclosed, contiguous hollow space. The fuel cell pack further comprises a porous fuel diffusion member, a porous air contact member, an anode end plate, a cathode end plate, fuel supply and discharge means, a fuel flow stopper and a sealing member as stated in the claim. The closest prior art of record, Walsh, does not teach the electrical connecting member is positioned in the enclosed, contiguous hollow space within the fuel cell pack. The invention of independent claims 2,18 recites a fuel cell pack including a plurality of cells, wherein the cells are evenly disposed in a plane with a space interposed between two adjacent cells, and an electrical connection member being positioned in the space. The fuel cell pack further comprises a porous fuel diffusion member, a porous air contact member, an anode end plate, a cathode end plate, fuel supply and discharge means, a fuel flow stopper and a sealing member as stated in the claim. A fuel inlet and a fuel outlet corresponding to the space are disposed on the anode end plate. The closest prior art of record, Walsh, does not teach or suggest the fuel inlet and the fuel outlet corresponding to the space are disposed on the anode end plate. The invention of independent claims 7,16,19, recites a fuel cell pack including a plurality of cells, wherein the cells are evenly disposed in a plane with a space interposed between two adjacent cells, and an electrical connection member being positioned in the space. The fuel cell pack further comprises a porous fuel diffusion member, a porous air contact

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member, an anode end plate, a cathode end plate, fuel supply and discharge means, a fuel flow stopper and a sealing member as stated in the claim. The electrical connection member has a shape of a mesh. The closest prior art of record, Walsh, does not teach or suggest the electrical connection member has a shape of a mesh. The invention of independent claims 8,20, recites a fuel cell pack including a plurality of cells, wherein the cells are evenly disposed in a plane with a space interposed between two adjacent cells, and an electrical connection member being positioned in the space. The fuel cell pack further comprises a porous fuel diffusion member, a porous air contact member, an anode end plate, a cathode end plate, fuel supply and discharge means, a fuel flow stopper and a sealing member as stated in the claim. Through holes are formed in the collector plates contacting the cathodes and the cathode end plate such that the through holes in the collector plates correspond to those in the cathode end plate one to one. The closest prior art of record, Walsh, does not teach or suggest the presence of through holes in the collector plates and their one-to-one relationship with those in the cathode end plate.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dah-Wei D. Yuan whose telephone number is (571) 272-1295. The examiner can normally be reached on Monday-Friday (8:00-5:00).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick J. Ryan, can be reached on (571) 272-1292. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and After Final communications.

Dah-Wei D. Yuan
January 15, 2004


Patrick J. Ryan
Supervisor, Art. Ex. Examiner
Art. Ex. Unit 1745